each R<sub>17</sub> is independently selected from the group consisting of H, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, alkoxy, substituted alkoxy, alkylalkoxy, substituted alkylalkoxy, polyalkylene oxide, substituted polyalkylene oxide, aryl, substituted aryl, heteroaryl, substituted heteroaryl, alkaryl, substituted alkaryl, aralkyl, substituted aralkyl, -(alkylene or substituted alkylene)-ON(R")2-(alkylene substituted or alkylene)-C(O)SR", -(alkylene or substituted alkylene)-S-S-(aryl or substituted aryl), —C(O)R",  $-C(O)_2R''$ , or  $-C(O)N(R'')_2$ , wherein each R'' is independently hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkoxy, substituted alkoxy, aryl, substituted aryl, heteroaryl, alkaryl, substituted alkaryl, aralkyl, or substituted aralkyl;

each  $Z_1$  is a bond,  $CR_{17}R_{17}$ , O, S, NR',  $CR_{17}R_{17}$ —  $CR_{17}R_{17}, CR_{17}R_{17}$ -O, O— $CR_{17}R_{17}$ ,  $CR_{17}R_{17}$ —
S, S— $CR_{17}R_{17}$ ,  $CR_{17}R_{17}$ —NR', or NR'—  $CR_{17}R_{17}$ ;

each R' is H, alkyl, or substituted alkyl;

each Z<sub>2</sub> is selected from the group consisting of a bond, —C(O)—, —C(S)—, optionally substituted C<sub>1</sub>-C<sub>3</sub> alkylene, optionally substituted C<sub>1</sub>-C<sub>3</sub> alkenylene, and optionally substituted heteroalkyl;

each  $Z_3$  are independently selected from the group consisting of a bond, optionally substituted  $C_1$ - $C_4$  alkeylene, optionally substituted  $C_1$ - $C_4$  alkenylene, optionally substituted heteroalkyl, —O—, —S—, —C(O)—, —C(S)—, and —N(R')—;

each  $T_3$  is a bond, C(R")(R"), O, or S; with the proviso that when  $T_3$  is O or S, R" cannot be halogen;

each R" is H, halogen, alkyl, substituted alkyl, cycloalkyl, or substituted cycloalkyl;

m and p are 0, 1, 2, or 3, provided that at least one of m or p is not 0;

M<sub>2</sub> is

where (a) indicates bonding to the B group and (b) indicates bonding to respective positions within the heterocycle group;

M<sub>3</sub> is

where (a) indicates bonding to the B group and (b) indicates bonding to respective positions within the heterocycle group;

M<sub>4</sub> is